

Notice of Allowability

Application No.

10/669,323

Examiner

Brian J. Sines

Applicant(s)

BOHM ET AL.

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 8/18/2006.
2. ☒ The allowed claim(s) is/are 2-4 and 6-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with D. Byers on 10/26/2006.

The application has been amended as follows:

Claim 1 has been canceled.

Claim 2. The device of claim [1] 7, wherein the [chemical layer] preliminary tube additionally contains iron or aluminum powder.

Claim 3. [A] The method [for detecting sulfuryl fluoride] of using a test tube according to claim 6, [in which a gas specimen to be examined is subjected to pyrolysis, with ensuing detection of a pyrolysis product,]
wherein:

the pyrolysis is performed with a chemical layer of pyrophoric iron above 400° Celsius,
and

the hydrogen fluoride concentration of the pyrolysis product is detected, using a colorimetric test tube, in order to detect sulfuryl fluoride.

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Claim 6. A method of using a test tube for detecting hydrogen fluoride as a pyrolysis product and determining sulfuryl fluoride in a gas specimen comprising:

choosing the test tube, the test tube containing pyrophoric iron and an indicator for detecting a pyrolysis product of sulfuryl fluoride and pyrophoric iron,

passing the gas specimen through the test tube,

detecting, in the test tube, hydrogen fluoride as [a] the pyrolysis product of the gas specimen, and

determining, from the detected hydrogen fluoride, the proportion of sulfuryl fluoride in the gas specimen.

Claim 7. A device for detecting sulfuryl fluoride in a gas specimen comprising:

a preliminary tube containing a chemical layer of pyrophoric iron,

a colorimetric test tube containing an indicator layer having an indicator for hydrogen fluoride and [with] a scale for hydrogen fluoride concentration, and

a connection means for joining the preliminary tube and the colorimetric test tube.

Allowable Subject Matter

Claims 2 – 4 and 6 – 8 are allowed.

The following is an examiner's statement of reasons for allowance:

1. Regarding claim 6, the cited prior art neither teach nor fairly suggest a method of using a test tube for detecting hydrogen fluoride as a pyrolysis product and determining sulfuryl fluoride in a gas specimen comprising:

choosing the test tube, the test tube containing pyrophoric iron and an indicator for detecting a pyrolysis product of sulfuryl fluoride and pyrophoric iron,

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passing the gas specimen through the test tube,

detecting, in the test tube, hydrogen fluoride as the pyrolysis product of the gas

specimen, and

determining, from the detected hydrogen fluoride, the proportion of sulfuryl fluoride in the gas specimen.

2. Regarding claim 7, the cited prior art neither teach nor fairly suggest a device for detecting sulfuryl fluoride in a gas specimen comprising:

a preliminary tube containing a chemical layer of pyrophoric iron,

a colorimetric test tube containing an indicator layer having an indicator for hydrogen fluoride and a scale for hydrogen fluoride concentration, and

a connection means for joining the preliminary tube and the colorimetric test tube.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines whose telephone number is (571) 272-1263. The examiner can normally be reached on Monday - Friday (11 AM - 8 PM EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Brian Kim". The signature is written in a cursive, flowing style with a large initial "B" and a long, sweeping underline.